

ABSTRACT

The present invention provides a method of forming an MRAM cell which minimizes the occurrence of electrical shorts during fabrication. A first conductor is provided in a trench in an insulating layer and an upper surface of the insulating layer and the first conductor is planarized. Then, a first dielectric layer is deposited over the first conductor and insulating layer to a thickness at least greater than the thickness of a desired MRAM cell. The first dielectric layer is then patterned and etched to form an opening over the first conductor for the cell shapes. Then, the magnetic layers comprising the MRAM cell are consecutively formed within the cell shapes and the first dielectric layer.